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NOTICE OF ALLOWANCE AND FEE(S) DUE

26646

7590

04/22/2002

KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004

EXAMINER YAMNITZKY, MARIE ROSE **ART UNIT** CLASS-SUBCLASS

1774

428-690000

DATE MAILED: 04/22/2002

1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
٠	09/449,801	11/26/1999	STEPHEN R. FORREST	10644/50101	6720

TITLE OF INVENTION: ORGANIC PHOTOSENSITIVE OPTOELECTRONIC DEVICE WITH AN EXCITON BLOCKING LAYER

TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
24	nonprovisional	YES	\$640	\$0	\$640	07/22/2002

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED, SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

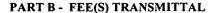
HOW TO REPLY TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:
- A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Complete and mail this form, together with applicable fee(s), to:

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Assistant Commissioner for Patents

Washington, D.C. 20231

MAILING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

maintenance fee notifica		ly mark-up with any corrections o	r use Block 1)	Note:	The certificate	of mailing below can or	ly be used for domestic	
26646 7590 04/22/2002				Note: The certificate of mailing below can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment				
KENYON & F				or for	mal drawing, mu	st have its own certificate o	f mailing.	
ONE BROADW						Certificate of Mailing		
NEW YORK, N				United	I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in a			
				envelo	ope addressed t ted below.	o the Box Issue Fee ad	iress above on the date	
							(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE	;	FIRST NAMED INVEN	TOR	·	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/449,801	11/26/1999	•	STEPHEN R. FORR	EST		10644/50101	6720	
TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PI	JBLICATION FEE	E TOTAL FEE(S) DUE	DATE DUE	
24	nonprovisional	YES	\$640		\$0	\$640	07/22/2002	
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TAMINITZK	1, MARIE ROSE	1774	428-09000					
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3. ASSIGNEE NAME A	ND RESIDENCE DAT	A TO BE PRINTED ON	THE PATENT (print of	r type)			······································	
PLEASE NOTE: Unle been previously submit (A) NAME OF ASSIG			ta will appear on the arate cover. Completi) RESIDENCE: (CIT			nee data is only appropriat substitute for filing an assig VTRY)	e when an assignment has nment.	
Please check the appropr	riate assignee category o	r categories (will not be pr	rinted on the patent)	O ir	ndividual 🗅 co	rporation or other private gr	roup entity	
4a. The following fee(s)	are enclosed:		Payment of Fee(s):					
a issue i ce				A check in the amount of the fee(s) is enclosed.				
a rubilcation ree			•	yment by credit card. Form PTO-2038 is attached. e Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to				
Advance Order - # o	of Copies					close an extra copy of this		
application identified ab-		ADEMARKS is requested	d to apply the Issue Fe	e and Pu	blication Fee (if	any) or to re-apply any pre	viously paid issue fee to the	
(Authorized Signature)		(Date)						
NOTE; The Issue Fee other than the applica interest as shown by th	and Publication Fee (int; a registered attorned e records of the United S	f required) will not be ac y or agent; or the assign states Patent and Tradema	ccepted from anyone see or other party in rk Office.					
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APPLICATION N	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/449,801 11/26/1999		11/26/1999	STEPHEN R. FORREST	10644/50101	6720	
26646	7590	04/22/2002		EXAMIN	EXAMINER	
KENYON &	kenyon	1		YAMNITZKY, MARIE ROSE		
ONE BROADWAY NEW YORK, NY 10004 UNITED STATES				ART UNIT	PAPER NUMBER	
				1774		
				DATE MAILED: 04/22/2002		

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

A9-#16/B Applicant(s)

`	09/449,801	FORREST ET AL.				
Notice of Allowability	Examiner	Art Unit				
	Marie R. Yamnitzky	1774				
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due o	ed course. THIS			
1. This communication is responsive to <i>Applicants' amendme</i>	ent received 04/49/02 (Pener No. 44)					
2. The allowed claim(s) is/are <u>1-24</u> .	<u> 11. receiveu 01/10/02 (Fapei 140. 14)</u>	•				
3. The drawings filed on are accepted by the Examine 3. The drawings filed on are accepted by the Examine.	r.					
4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the:						
1. Certified copies of the priority documents have	been received.					
2. Certified copies of the priority documents have	been received in Application No					
. 3. Copies of the certified copies of the priority do	cuments have been received in this r	 national stage applicat	ion from the			
International Bureau (PCT Rule 17.2(a)).						
* Certified copies not received:						
5. Acknowledgment is made of a claim for domestic priority un	nder 35 U.S.C. § 119(e) (to a provisio	onal application).				
(a) The translation of the foreign language provisional a						
6. Acknowledgment is made of a claim for domestic priority un	nder 35 U.S.C. §§ 120 and/or 121.					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of 7. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which gives reas	this application. THIS THREE-MON itted. Note the attached EXAMINER	ITH PERIOD IS NOT IT IN	EXTENDABLE			
The of the Letter of the Letter (1 to 102) which gives lead	on(5) why the bath of declaration is	denoient.				
8. CORRECTED DRAWINGS must be submitted.						
(a) including changes required by the Notice of Draftsper	son's Patent Drawing Review(PTO-	948) attached				
1) ☐ hereto or 2) ☒ to Paper No. <u>11</u> .						
(b) ☐ including changes required by the proposed drawing of Examiner.	correction filed <u>18 January 2002,</u> wh	nich has been approve	ed by the			
(c) ☐ including changes required by the attached Examiner	s Amendment / Comment or in the C	Office action of Paper I	Vo			
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.						
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T	sit of BIOLOGICAL MATERIAL m HE DEPOSIT OF BIOLOGICAL MA	nust be submitted. N TERIAL.	lote the			
Attachment(s)						
 1⊠ Notice of References Cited (PTO-892) 3□ Notice of Draftperson's Patent Drawing Review (PTO-948) 5□ Information Disclosure Statements (PTO-1449), Paper No 7□ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	2☐ Notice of Informa 4☑ Interview Summa 6☑ Examiner's Amer 8☐ Examiner's State 9☐ Other	ary (PTO-413), Paper indment/Comment	No. <u>15</u> .			

Application No.

Art Unit: 1774

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for the examiner's amendment to the claims was given in a telephone interview with Kevin Godlewski on 04/19/02.

The claims have been amended as follows:

Claim 25 has been cancelled.

The specification has been amended as follows in order to update the status of cited U.S. patent applications. These changes were not discussed with Mr. Godlewski.

Page 1, lines 1-3 have been deleted and replaced with the following text:

This is a continuation-in-part application of U.S. Patent Applications with Serial Numbers 09/136,342, 09/136,166, 09/136,377, 09/136,165 and 09/136,164, each filed on August 18, 1998, now U.S. Patent Numbers 6,352,777, 6,297,495, 6,278,055, 6,198,092 and 6,198,091, respectively.

Page 10, line 19: --, now abandoned-- has been inserted after "09/311,126".

Page 17, lines 6-7: "with Serial Numbers...09/136,164" has been deleted and replaced with --, now patented and having U.S. Patent Numbers 6,352,777, 6,297,495, 6,278,055, 6,198,092 and 6,198,091,--.

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Application/Control Number: 09/449,801

Art Unit: 1774

In the first full paragraph on page 30 (the replacement paragraph provided by applicants): "("'800 Application")" has been changed to --, now U.S. Patent No. 6,333,458,--.

Page 32, line 6: "the 50501 Application" has been changed to --U.S. Patent No. 6,333,458--

The references made of record and not relied upon are considered pertinent to applicant's disclosure.

The four U.S. patents listed on the attached PTO-892 for which no copies are provided issued from copending applications previously disclosed by applicants and considered by the examiner (see the PTO-1449 considered 08/13/01).

The patent to Ito et al. (5,652,067) discloses the WF (eV) and LUMO (eV) for quinacridone and copper phthalocyanine (CuPc). See Tables 2 and 3. The examiner understands the WF value to be the same as or similar to the HOMO value for these two compounds. While this data supports the examiner's position set forth in Paper No. 11 that the bandgap of quinacridone is about 2.3 eV and is higher than the bandgap of copper phthalocyanine, the examiner withdraws her position that the differences between the bandgaps of these two compounds necessarily means that the quinacridone layer in Example 5 of the Yoshikawa patent (5,201,961) inherently functions as an exciton blocking layer. In particular, the examiner notes that the examples in the present specification utilize materials having a greater difference in bandgaps between the materials of the exciton blocking layer and the adjacent hole or electron transport layer than provided by Yoshikawa's Example 5.



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Page 4

In reconsideration of the teachings of the present specification as a whole, and lack of evidence to support the examiner's arguments regarding inherency as set forth in the prior art rejection based on the Yoshikawa patent and in the prior art rejection based on the Suzuki patent (5,350,459), the examiner withdraws the prior art rejections.

Claims 1-24 are allowed.

Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (703) 308-4413. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax numbers for Art Unit 1774 are (703) 872-9311 for official after final faxes and (703) 872-9310 or (703) 305-5408 for all other official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (703) 872-9041.)

MRY 04/19/02

> MARIE YAMNITZKY PRIMARY EXAMINER

Marie R. Gammitzky

1774

